6.17 WORKER SAFETY

Worker safety is a high priority at the existing Morro Bay Power Plant (MBPP). This section presents an evaluation of existing worker safety practices at MBPP and potential impacts resulting from the Project, including demolition of onsite fuel oil storage tanks, construction and operation of the new combined-cycle units, and demolition of the existing power building and existing stacks for Units 1 through 4.

The worker safety practices at MBPP have evolved since the 1950s, in accordance with industry standards and federal and state regulations, resulting in a safe operational environment at MBPP. In support of these safe operations at MBPP, Duke Energy maintains an extensive health and safety program in compliance with current laws, ordinances, regulations and standards (LORS). Duke Energy will continue to implement this comprehensive safety program for the Project.

Safe use and handling of hazardous materials are given close attention. Several programs at MBPP already address hazardous materials storage locations, emergency response procedures, employee training requirements, hazard recognition, fire prevention and control procedures, hazard communications training, personal protection equipment training and release reporting requirements.

The existing program of employee training for safe handling of hazardous materials includes both initial and refresher training to assure that appropriate personnel are kept up to date on coordination with response agencies, proper use of onsite emergency response equipment, and hazardous materials information in the Business Plan/Contingency Plan (Duke Engineering, 2000), Spill Prevention Control and Countermeasures (SPCC) Plan (TRC, 1998), and Stormwater Pollution Prevention Plan (PG&E, 1996). Volume II of the Business Plan/Contingency Plan is the Facility Emergency Response Plan that contains detailed instructions for plant personnel to follow in the event of a hazardous material release, fire, flood, earthquake or explosion. The information includes maps, diagrams, contacts, teams, first aid and a description of the Incident Command System. These programs are discussed in more detail in Section 6.15 - Hazardous Materials Handling.

To support safe construction practices, construction and demolition contractors at MBPP will obtain Duke Energy approval of their site-specific health and safety programs, assuring consistency with the Duke Energy health and safety program, and compliance with applicable LORS. This plan will directly address the various elements of Project construction, including provisions for a safe work environment to accommodate a daily peak of approximately 831 construction personnel.

Fire prevention requirements and resources have been analyzed for the following main activities associated with the Project:

- Disassembly and removal of onsite fuel oil tanks.
- Construction of new CTGs.
- Demolition of existing power building and stacks.
- Operation of the CTGS.

Duke Energy Morro Bay LLC (Duke) and the City of Morro Bay have an agreement since May 11, 1999 that the City assumes the lead role in fire suppression, hazardous materials and emergency response activities at the MBPP. Duke Energy will continue to work with the City to provide additional fire prevention resources. Joint planning by Duke Energy and the City will continue to assure that reasonably foreseeable contingencies can be safely handled.

BENEFITS OF THE PROJECT

Beneficial aspects of the Project related to worker safety are:

- Continuation of proven operations health and safety program at MBPP.
- Ongoing worker training to assure safe work practices and coordinated emergency response.
- Development of comprehensive site-specific construction health and safety program.
- Fundamental requirement that contractors, consultants and vendors will be held to the same safety standards and requirements as MBPP personnel.
- Proposal of additional fire prevention resources to assure fire safety during all Project activities.

6.17.1 EXISTING ENVIRONMENT

The MBPP is located in the City of Morro Bay, about 12 miles northwest of San Luis Obispo, California in San Luis Obispo County. The plant is situated west of Highway 1 near to Morro Bay Harbor and east of Estero Bay. The area includes light industry, commercial operations, and marine, recreational and residential uses.

The existing environment for occupational worker health and safety protection includes procedures, plans and programs currently implemented at MBPP in compliance with applicable LORS. These include current worker safety procedures in place for ongoing operation and maintenance of the power plant and for minor construction activities that occur during normal facility operations.

As a result of implementing existing Duke Energy corporate policy, assignment of specific management responsibilities and use of accident and illness prevention procedures has produced acceptable safety performance. Duke Energy has two quantitative safety performance goals, which

are specified in terms of incidence rate of lost-time accidents (per 200,000 man-hours worked) and workers' compensation loss ratio. These goals are used to establish specific levels of performance for the site. To reinforce management's commitment to safety, safety performance is an integral part of each manager's performance appraisal.

6.17.1.1 Operations and Maintenance (O&M) Health and Safety Program

The existing health and safety policies in effect at MBPP include provisions for ongoing O&M, including incidental construction activities, and address safety programs, personal protective equipment and fire suppression.

6.17.1.1.1 Injury and Illness Prevention Program

The Duke Energy Injury and Illness Prevention Program (IIPP) is implemented at MBPP. Its purpose is to establish and maintain a safe working environment for employees and contractors.

Managers and supervisors are responsible for implementing and maintaining the IIPP in their work areas, and for answering worker questions concerning the IIPP. In addition, management and supervisory personnel are expected to serve as a role model for safety in the workplace.

Employees are responsible for their own safety. Each employee is required to follow the requirements of the Code of Safe Work Practices Manual and the IIPP, and is expected to comply with Duke Energy safety and health policies and procedures. Employees are required to report injuries to their supervisor as soon as possible, but in no case later than the end of the work shift.

Contractors shall comply with their own company's safety and health policies and procedures, based on Duke Energy review and assurance that contractor policies are compatible with its own. Duke Energy has an interactive dialogue with the contractor if conflicts appear or there is potential for doing work differently than described in the contractor policies. Safety will be the overriding factor in resolving such issues.

The Regional Safety Coordinator is responsible for keeping the IIPP current. In addition, the coordinator shall provide information to site management on effectiveness of the safety program(s) and offer recommendations for improvement. The safety committee is responsible for promoting

safe working conditions throughout MBPP and for promoting safety awareness among site employees, management and supervision. It also serves as an avenue for communicating safety concerns and issues.

Safety Committees

Duke Energy employees serve on site safety committee meetings. The frequency of the site meetings is based on the needs of the site, but not less than twice per year. Duke Energy site safety committees will be made up of a representative number of employees from the organization.

Safety Training

Duke Energy has a safety orientation program for new, contract and permanent employees. Safety training with appropriate handouts is conducted to minimize the risk of injury to these workers and to inform them of basic emergency procedures. This training is conducted and documented prior to workers being assigned tasks inside the plant. The safety training matrix (see Table 6.17-1) contains specific training requirements, in compliance with California Code of Regulations (CCR) Title 8.

Specific training is provided to supervisors and foremen to familiarize them with safety and health hazards to which their employees may be exposed. In addition, supervisors and foremen receive as-needed training so they can educate their employees to hazards during toolbox and weekly safety meetings.

Employees onsite receive additional training whenever a process changes, a new hazard is introduced into the workplace, or regulatory actions identify new hazards. This training is conducted in a timely manner and documented.

Training is provided to employees periodically to assure they maintain their safety skills. This training is conducted annually for compliance or to address deficiencies discovered through work practices, accidents or supervisory recommendations. This training may include, but is not limited to:

- Medic First Aid and CPR training
- Fire extinguisher training
- Respiratory and hearing protection training
- Asbestos hazard training
- Bloodborne pathogens training
- Site-specific chemical hazards

TABLE 6.17-1

SAFETY TRAINING MATRIX

TYPE OF SAFETY TRAINING	COMPLIANCE	PERSONNEL
Emergency Action and Fire Prevention Plans (initial and when plans change)	8 CCR 3220, 3221	All employees.
Fire Extinguishers	8 CCR 6151	All who are required to use fire extinguishers.
Hazard Communication and Prop 65	8 CCR 5194	All employees.
• Pesticide and/or Fumigation Safety	8 CCR 5194	All who may enter building crawl spaces after fumigation.
• PCB Safety	8 CCR 5194	All who may handle PCBs.
First Aid (includes CPR [multi-year certification])	8 CCR 3400, 1512	Designated first aid attendants.
Bloodborne Pathogens	8 CCR 5193	Designated first aid attendants.
Office (VDT) Ergonomics	8 CCR 5110 and PG&E/IBEW Letter Agreement #92-24	Selected departments.
Physical Ergonomics (includes hand arm vibration)	8 CCR 5110	All except estimators, office, clerical, lab employees.
Hearing Conservation	8 CCR 5095-99	Selected departments with job classifications listed in Standard Practices 726-11.
Respiratory Protection	8 CCR 5144	Employees required to wear respirators (welders, confined space workers, etc.).
Confined Spaces	8 CCR 5156-58	Employees who enter underground facilities, transformers, water tanks, etc.
Asbestos Awareness	8 CCR 1529, 5208	Employees who contact/remove asbestos.
Asbestos Workers	8 CCR 1529, 5208	Painters, building maintenance personnel.
Forklifts (initial training only)	8 CCR 3664	Forklift operators.
Cranes (initial training only)	8 CCR 5006	Crane operators.
Lead	8 CCR 5216, 1532.1	Painters, cable splicers, others exposed to airborne lead.
Hazardous Waste Operations and Emergency Response	8 CCR 5192	Workers at treatment, storage and disposal facilities, hazardous cleanup investigators, or as required by California agencies.
Private Fire Brigades	8 CCR 3411	Employees assigned to plant fire brigades.
Hazardous Chemicals in Laboratories	8 CCR 5191	Lab personnel.
Diving Operations (divers only)	8 CCR 6052	Maintenance, lab personnel.
Explosives (users only)	8 CCR 5276	Maintenance, construction personnel.
Other - as identified by need (defensive driving, strains and sprains, vehicle inspection)	Cal/OSHA Section 3203	As needed.

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Source: PG&E, 1998.

Safety and health training is documented and recorded in the site training record. Records are maintained as described under Recordkeeping.

Safety Meetings

There are periodic safety meetings for MBPP employees. These safety meetings may be conducted for the purpose of training, to discuss safety issues and concerns, or to review accidents that have occurred. The frequency, duration and target audience of the safety meetings is based on operational and site-specific requirements. Attendance at these meetings is documented.

Each crew or work team conducts a brief toolbox safety meeting daily to discuss assigned jobs and the hazards associated with them. For tasks that occur with separate work teams working together (i.e., O&M), a toolbox safety meeting is also held for that specific job prior to beginning work. Toolbox or daily safety meeting attendance does not require documentation, but at least one crew safety meeting per week is documented.

Safety Incentive Program

For every month the plant goes without an Occupational Safety and Health Administration (OSHA) recordable injury, there is a plant-wide barbecue. Every Wednesday the Maintenance Department safety meeting has a drawing for an incentive gift. Every Thursday the Operations Department hands out an incentive gift at its safety meeting.

The plant has a Hazard Awareness drawing where employees submit slips describing different hazards at the plant. Every week an incentive gift is drawn by some contributing employee. If the plant goes 6 months without an OSHA recordable injury, employees are given a Circle of Safety recognition.

If an employee does something special to help plant safety performance, the supervisor recognizes the effort by providing the employee an opportunity to pick a safety incentive gift. A Gift Locker is stocked for this type of recognition.

Safety Inspections/Hazard Control

Periodic safety inspections are conducted. The site safety supervisors coordinate with the site planner/scheduler to arrange for qualified personnel to participate in the inspections. The inspection frequency is determined by plant needs through the safety committee.

Safety inspections are documented, and records are retained. A copy of the inspection findings is forwarded to the site production superintendent and safety supervisors.

Hazards identified through the safety inspection process are corrected as soon as possible; those that pose an imminent threat or danger are addressed immediately. While awaiting action, dangerous hazards are barricaded, tagged out, or otherwise isolated from workers. Employees that could be expected to approach dangerous hazards during the normal course of their duties are notified verbally or in writing. Actions may include one or more of the following:

- Barricading or marking of the hazard
- Removal of employees from the area
- Development of alternative procedures
- Additional training on the involved equipment

Findings of the safety inspections are posted. The inspection report is reviewed during the next safety committee meeting, and feedback is solicited from site employees.

Accident Investigations

It is Duke Energy policy to investigate all accidents that are recordable or are considered a serious near miss. A serious near miss is an incident that would have resulted in a fatality or serious injury if the employee had actually been injured. The investigation team is required to submit an investigation report to Duke Energy management and the safety committee. This process allows full access to the information needed to revise unsafe acts or remove conditions that caused the accident. An accident investigation is intended to determine the cause of the accident, and offer solutions for corrective action so as not to have a recurrence.

An investigation is organized as soon as possible following an accident to gather information and facts from the involved parties. Photographs and interviews are used to assist in the investigation process. The investigating team uses the process outlined in the Occupational Incident Investigation Aid and the Morro Bay Power Plant Supervisor's Guidelines for Handling

Industrial Injuries. For each incident, the supervisor fills out an Incident Investigation Report (see Appendix 6.17-1). As necessary, a Report of Industrial Injury and Employer's Claim for Workers' Compensation Benefits may also be completed.

Recordkeeping

Employee and contractor safety training is documented, including at least the following information:

- Trainee's name
- Company ID or Social Security numbers
- Subject of training
- Date(s) of training
- Duration (hours) of training
- Name of instructor

An Incident (e.g., injury, illness, near miss) Investigation Report (see Appendix 6.17-1) contains at least the following information:

- Name of injured
- Date and time of the incident
- Type of incident
- Extent of injury or damage
- Names of crew members and foreman
- Events leading up to the incident
- Description of the incident
- Additional facts surrounding the incident
- Recommendations to prevent recurrence
- Root cause of incident
- Conclusion statement
- Names and signatures of the investigating team

Accident reports are considered confidential information. Summaries of the reports, with names of the involved parties removed, may be shared for accident prevention purposes. The original copy of the report shall be submitted to the site safety supervisor.

Safety inspections are documented. An accurate record of observed hazards is maintained. A safety inspection report contains at least the following information:

- Name(s) of the inspector(s)
- Date(s) of the inspection
- Specific location of hazard, including elevation
- Description of hazard or
- Description of unsafe work practices
- Corrective actions recommended or taken

In addition, records are maintained to document progress in correcting hazards identified during the inspection. A projected date for correction is set for items that may not be immediately corrected and subsequent actions put in place to assure each item is addressed in a timely manner.

Safety training records are maintained at MBPP. Safety meeting minutes, and safety inspection reports are maintained for at least 3 years. Accident investigation reports and OSHA 200 logs are maintained at least 5 years. Records are maintained in accordance with CCR Title 8.

Compliance

It is Duke Energy's policy to enforce the provisions of the IIPP. Methods of compliance may include, but are not limited to, the following:

- Training
- Prompt action taken on issues and hazards
- Audits
- Investigations
- Inspections
- Evaluations

In addition, corrective action is taken where appropriate. Safety incentive and recognition programs are encouraged.

Contractor/Vendor Safety

Contractors and vendors working onsite are required to provide copies of their safety programs and/or injury and illness prevention program to Duke Energy for approval prior to beginning work onsite. Contractors/vendors are held to the same safety standards and requirements as MBPP staff.

Contractors/vendors performing work at MBPP are provided safety orientation training as outlined in the IIPP prior to commencing work. Contractors are responsible for providing their employees with required personal protective equipment. Contractors are responsible for training their personnel appropriately for their work. In addition, this training is required to comply with applicable laws and sections of CCR Title 8.

Contract employees under direct supervision of Duke Energy are provided appropriate training to enable them to perform their jobs safely and to comply with applicable regulations.

Communications

Information concerning safety hazards is communicated to employees through general postings in the plant, safety meetings and electronic communications.

Duke Energy assures communication of information surrounding an injury or near miss following completion of the investigation. Names of the involved parties are withheld. The intent of this practice is to prevent recurrence of similar accidents by raising awareness and correcting hazards underlying accidents.

Site personnel communicate information concerning personal injury, near misses and safety hazards to their supervisor or appropriate authority as soon as possible. Injuries are documented on the appropriate form (see Table 6.17-2).

6.17.1.1.2 Fire Protection Plan

Fire protection is a combination of fire prevention activities and fire suppression resources should a fire occur.

Fire prevention at MBPP consists of measures to prevent fires, including fire-safe construction, reduction of ignition sources and control of fuel sources. These measures also include safety procedures such as provision and marking of adequate exits, plus training in safe procedures for operation of equipment and vehicles.

The MBPP relies on both onsite fire protection systems and the Morro Bay Fire Department's (MBFDs) fire protection and emergency response services.

The existing fire protection system at the site is adequate for fighting incipient fires, but fighting major structural fires will require the services of the MBFD. The existing fire protection system at the site includes fixed water fire suppression systems, fire hose stations, hydrants, portable fire extinguishers, detection and control systems, and other equipment. The system is designed and operated in accordance with National Fire Protection Association standards and recommendations. The existing fire protection system consists of fire extinguishers, and water and hose systems. The water and hose system is based on an underground firewater piping network. Water comes from a

TABLE 6.17-2

REPORT OF INDUSTRIAL INJURY

1. Name: _____ 6. Home Telephone No.: _____

2. Home Address: _____ Zip Code: _____

3. Region/Division: _____ 7. Department: _____

4. Social Security No.: _____ 8. Date of Accident: _____

5. Occupation: _____ 9. Time of Accident: _____

10. Location of Accident: _____

11. Nature of Injury: _____ Part of Body: _____

12. What were you doing and how did accident occur? _____

_____

13. Third Party Information: _____

14. Describe First Aid Rendered: _____

15. Witnesses to Accident: _____

16. Date Injury Reported: _____

17. Did you lose time from work beyond date of injury? Yes ❑ No ❑

18. Did you receive medical treatment other than first aid? If yes, indicate name and address of medical provider: Yes ❑ No ❑

_____

19. Do you need medical treatment other than first aid? Yes ❑ No ❑

20. _____ 21. _____

Signature of Employee *Signature of Supervisor/Telephone No.*

22. Date this form prepared: _____

million gallon tank onsite and a 500,000-gallon tank on a hill near the plant. This location supplies a higher head for water, which also serves as the source of raw and domestic water.

Written plans and procedures for fire prevention at MBPP are kept onsite in accordance with CCR Title 8, Section 3221. Elements required in the Fire Prevention Plan are contained in the following documents:

- MBPP Incipient Fire Manual (updated April 10, 1995 by Pacific Gas & Electric Company [PG&E])
- MBPP Monthly Fire System Equipment Inspection and Test Sheets
- Health and Safety Policies and Procedures (updated July 1, 2000 by DFDCO)
- Duke Energy Morro Bay Memorandum of Understanding (MOU) with the City of Morro Bay Fire Department (MBFD) (updated May 11, 1999 by Duke Energy)
- MBPP Facility Emergency Response Plan (Duke Engineering, 2000)

The above documents contain the following elements:

- Potential fire hazards and their proper handling and procedures.
- Potential ignition sources and their control procedures.
- Fire protection equipment and systems which can control a fire involving fire hazards and their ignition sources.
- Procedures for maintenance or equipment and systems associated with fire prevention and protection.
- Identification of personnel responsible for maintenance of fire prevention equipment.
- Identification of personnel responsible for the control of flammable/ combustible wastes.
- Housekeeping procedures for waste to prevent fire contribution.
- Employee training of fire hazards and emergency response, to First Responder level only.
- Employee training for incipient level fire response only.

MBPP and the MBFD have an MOU which provides that the MBFD shall provide fire response above incipient level response. Additionally, the MBFD along with other San Luis Obispo County Fire Departments, provides Hazmat response using Hazmat Technicians from various County Fire Departments and equipment strategically located in the County. Duke Energy will work directly with MBFD regarding the introduction of tanks of aqueous ammonia at MBPP.

The MBFD has first-responder responsibility for the power plant. As such, fire prevention and suppression systems are subject to review and approval by the MBFD.

6.17.1.1.3 Emergency Action Plan

Volume II of the Business Plan/Contingency Plan is the existing Facility Emergency Response Plan (Duke Energy, 2000). It provides specific procedures to be followed in the event of an emergency situation. Potential emergencies include, but are not limited to, spill or release of hazardous materials, such as hydrazine and sodium hydroxide, fire, explosion, bomb threat or natural disaster (e.g., earthquake, flood). Emergency information in the Facility Emergency Response Plan consists of more than 100 pages of details, and includes maps, diagrams, contacts, teams, first aid, and a description of the Incident Command System. A more detailed outline of the contents of the Plan is provided in Table 6.17-3.

More detailed information on the handling of a hazardous materials emergency is provided in Section 6.15 - Hazardous Materials Handling, and more detailed information on the handling of a waste emergency is provided in Section 6.14 - Waste Management.

6.17.1.1.4 Personal Protective Equipment

Policies and procedures on personal protective equipment include the following:

- **Personal Protective Equipment Policy** - Presents safety procedures regarding respiratory protection, eye protection, footwear and head protection. It includes the selection of suitable equipment, proper fitting, training, limitations and maintenance.
- **Hard Hat Policy** - Contains additional detail on use, inspection and care of hard hats. Included is a replacement schedule for the hard hat shell and suspension and directions for the placement of decals on the external and internal hard hat shell.
- **Eye and Face Protection Policy** - Describes the requirements for use of approved eye and face protection. It covers numerous types of eye and face protection, fit, inspection and care.

In addition, the SPCC Plan identifies provisions for accessing protective clothing and equipment approved by the National Institute of Occupational Safety and Health (NIOSH), including:

- Chemically resistant apparel, gloves and boots.
- Protective head, eye and face gear.
- Individually fitted half-mask and full-face respirators with various cartridges.
- Self-contained breathing apparatus (available for use only by trained plant personnel).

TABLE 6.17-3

OUTLINE OF FACILITY EMERGENCY PLAN
MORRO BAY POWER PLANT

I. Spill or Release of Hazardous Materials

- A. Asbestos
- B. Acids/Bases
- C. Hydrazine
- D. Flammable Gases
- E. Oil-based Liquids
- F. Other Chemicals
- G. Pond Wastes
- H. Inventory

II. Fire, Flood, Earthquake, Explosion or Bomb Threat

- A. Fire - General Procedures
- B. Fire with Hazardous Chemicals
- C. Earthquake
- D. Bomb Threat
- E. Flash Flood/Flood/Extremely High Tide

III. Codes, Incident Command System, and First Aid

- A. Emergency Codes
- B. Incident Command System (ICS)
- C. First Aid (General)
- D. Crisis Management

IV. Teams and Contacts

- A. Fire/Rescue/Police/Ambulance
- B. Plant Emergency Response Personnel
- C. DFDCO Specialists and Contacts
- D. New Media Inquiries
- E. Private Spill Response Organizations
- F. Government Response Organizations and Contacts
- G. Other Services/Suppliers
- H. Community Notification Network

V. Maps and Diagrams

- A. City of Morro Bay
- B. HAZMAT/Hazardous Waste Storage Areas
- C. Spill Response Equipment
- D. Evacuation Routes
- E. Storm Drain Piping/Catch Basins
- F. Hospital Information

VI. Plan Administration

- A. Title Page with Facility Manager's Signature
- B. Update Log
- C. Response Equipment/Supplies Checklist
- D. Incident Record
- E. Emergency Release Follow-up

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6.17.1.2 Safety Training Programs

6.17.1.2.1 Personnel Training

Personnel training is described in the June 1998 Hazardous Waste Permit Application. Safety training as it relates to the IIPP is described in Section 6.17.1.1.2. Programs are in compliance with 22 CCR 66264.16 and 66270.14(b)(12).

Description

The MBPP manages compliance with training requirements through an integrated and comprehensive employee training program. The program consists of trainer qualifications, recordkeeping procedures and a detailed description of employee training requirements. This information is contained in instructional units that are provided to employees based on their job activities. The program consists of classroom instruction and on-the-job training, and teaches employees to perform their duties in a way that assures worker safety and facility compliance with local, state and federal regulations. The program offers over 60 different courses and covers subjects such as:

- Environmental Training Courses:
  - Hazardous Materials
  - Hazardous Waste
  - Hazard Communication
  - Emergency Response
  - HAZWOPER (i.e., hazardous waste operations)
- Health and Safety Training Courses:
  - Confined Space
  - Clearance Procedures
  - Electrical Safety
  - Hearing Conservation
  - Forklift Training
  - Medical Surveillance
  - Respirator Protection
  - Respirator Fit Testing
  - Injury and Illness Prevention Program

A training matrix is utilized to determine the training schedule for each year. Except for refresher training, not all courses are presented every year. This flexibility is necessary to focus training where needed. For example, although boiler chemical cleanings are not conducted every year, specific training is provided when that operation occurs.

The process to determine which courses should be provided to each job title for proper management of the hazardous waste surface impoundments follows:

- Identify major functions performed for the surface impoundments in the areas of environmental compliance, hazardous waste or emergency response.
- Further define each major function by listing the primary associated tasks/activities.
- List training courses that offer training in the tasks/activities.
- List job titles that perform the tasks/activities listed.

The employee training program manages training requirements for employees whose positions at MBPP are related to hazardous waste management and/or emergencies related to the surface impoundments. This program meets personnel training requirements for surface impoundments, as specified in CCR Title 22 Sections 66264.16 and 66270.14(b)(12), and CCR Title 8 Section 5192. The program:

- Assures that facility employees with hazardous waste management responsibilities can respond effectively to emergencies involving the surface impoundments. Program provides initial and refresher training on emergency response for employees responsible for the surface impoundments operation.
- Includes instruction (both introductory and continuing) that teaches facility employees about hazardous waste handling and management procedures.
- Provides a job description for each position related to hazardous waste management of the surface impoundments. Job descriptions include skills, qualifications and duties assigned to each employee.
- Describes the type and amount of both introductory and continuing training that will be given to each employee relevant to their hazardous waste management positions.

Training Records (CCR Title 22 Sections 66264.16[d][4] and [e])

Training records are kept until closure of MBPP on current employees, and at least 3 years after the termination date for former employees. Required documentation, including the full training program description, is maintained at MBPP.

Training Director (CCR Title 22 Section 66264.16[a][2])

Training is directed by the environmental specialist. Training is provided by either the environmental specialist or another professional with knowledge of federal, state and local regulations obtained through specific hazardous waste/materials seminars, technical education and/or experience. The environmental specialist assures that:

- Employees are trained within 6 months of starting a job assignment that involves the handling or management of hazardous waste at the surface impoundments.
- Employees who handle hazardous wastes at the surface impoundments are not permitted to work without supervision until they have successfully completed the required training.
- Employees are retrained annually.

6.17.1.2.2 Hazardous Materials Training

Volume I of the Business Plan/Contingency Plan (TRC, 1998) provides an outline for the MBPP employee training program as it relates to hazardous materials other than those at the surface impoundments. These are described in the following paragraphs.

Methods for Safe Handling of Hazardous Materials:

- MBPP maintains a formal training program for employees whose jobs are related to hazardous materials management and potential emergencies involving hazardous materials. The program teaches employees to handle hazardous materials safely and includes classroom instruction and on-the-job training.
- Key aspects of the program include hazard communication, accident prevention, proper use of personal protective equipment and, for some employees, emergency response training. The program is designed to comply with training requirements of CCR Title 22 Section 66264.16; CCR Title 19 Section 2732; and applicable portions of CCR Title 8 and other relevant regulations. Required training documentation, including a full description of the program and records of employee training, are maintained onsite.

Procedures for Coordinating Activities with Response Agencies:

- Employees with emergency response responsibilities are trained in procedures contained in the Facility Emergency Plan, including appropriate onsite and offsite communications and coordination. The roles and coordination with response agencies are implemented through the Incident Command System described in the Facility Emergency Plan.

Proper Use of Onsite Emergency Response Equipment:

- Employees with emergency response responsibilities are trained in procedures contained in the Facility Emergency Plan, and in the use and capabilities of emergency response equipment. Training includes information on the location, capabilities and proper use of facility emergency controls, fire suppression equipment, first aid equipment, spill containment and cleanup equipment, and personal protective equipment for response scenarios.

Familiarization With Business Emergency Response Plans and Procedures:

- Employees with emergency response responsibilities are trained in the content and use of the Business Plan/Contingency Plan. Training occurs, at a minimum, when employees are initially assigned to positions that may involve emergency response to hazardous material releases, and during annual refresher training. Each key employee who would direct emergency responses has a copy of the Business Plan/ Contingency Plan.

Provisions for Initial and Refresher Training:

- The training program is designed to assure that MBPP maintains full compliance with applicable training requirements of CCR Titles 8, 19 and 22, and other relevant regulations. Site management assures that initial and refresher training is completed by each employee. Onsite training records document that appropriate initial and refresher training has occurred.

6.17.1.3 Fuel Handling, Storage and Fire Suppression

6.17.1.3.1 Fuel Handling and Storage

Fuels utilized onsite include natural gas, gasoline and diesel. Natural gas is used to fire the boilers, and gasoline and diesel are used for vehicles and generators. Fuel oil, light oil (cutter stock) and fuel oil additive are no longer utilized at MBPP, and have been removed. Because the displacement tank contains a cutter stock and water mixture, preexisting worker safety measures are still in effect.

There are five fuel oil tanks, each within an earthen containment dike capable of holding the tank volume plus precipitation. A sump pump drains the trench of stormwater via the oily water separator system. Other tanks containing petroleum products onsite also are equipped with secondary containment structures (TRC, 1998). The lube oil reservoirs and turbine generating equipment oil systems are monitored in the power plant control room. In the event of a problem, both visual and auditory alarms would be triggered.

Power plant operators perform and document SPCC inspections every 2 weeks. Appropriate personnel are trained for SPCC annually. Training includes, but is not limited to, applicable oil pollution control regulations, rules and regulations regarding operation and maintenance of equipment to prevent discharges of oil, and spill response procedures (TRC, 1998). Onsite security is designed to prevent unauthorized entry or vandalism that could impact fuel systems. Areas of MBPP that contain large quantities of oil are fully illuminated by automatic lights.

At the offsite fuel farm, the fuel oil and displacement oil tanks are empty and no natural gas is located there. The diesel fire pumps are not needed and the fire pump diesel fuel tank is empty. A concrete containment berm was constructed around the oil-filled transformer. This construction was coordinated with appropriate agencies. Follow-up includes monthly SPCC inspections. The Fire Water Storage Tank will be kept available for service as long as possible during demolition/ salvage activities.

Fuel Delivery

Infrequently, tank trucks deliver diesel fuel and gasoline. Gasoline is transferred at the vehicle fuel tanks. Diesel also is transferred at the vehicle fuel tanks, Firehouses No. 1 and 2, and the emergency generator.

Gasoline and diesel fuel is contained in aboveground fuel tanks that are filled by tanker truck. Spills during the filling process are avoided by the following design features and precautions:

- Fuel delivery companies utilize leakproof couplings.
- Drivers are trained to pay constant attention during the transfer process.
- Warning signs at the unloading area caution about completely disconnecting all transfer lines and hoses prior to departure.
- Connections are checked for leakage prior to the truck's departure.
- The gasoline and diesel fuel are dispensed at the fueling area by pumps with automatic shutoff valves.

On November 17, 1995, the U.S. Environmental Protection Agency (EPA) issued a letter designating MBPP a nonsubstantial harm facility due to the markedly reduced volume of fuel oil stored there. Accordingly, MBPP is not required to maintain a Facility Response Plan. Instead, spill response procedures are outlined in the Facility Emergency Plan, and Duke Energy personnel continue to follow procedures that minimize the chance of a spill.

Fuel transfer facilities at MBPP have manuals for operation, maintenance and emergency procedures. Piping from diesel fuel storage tanks is double-walled and aboveground. Operating

personnel regularly observe aboveground valves and piping, tile conditions of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, and locking or securing of valves and metal surfaces. Problem areas are noted for investigation and repair.

Vehicular traffic is warned by signs to avoid aboveground piping and other oil transfer operations. In the event of an oil spill, personnel would respond in accordance with procedures described in the SPCC Plan (TRC, 1998). Prior to the Project, aboveground fuel oil piping will be removed as part of the separate fuel tank demolition project.

6.17.1.3.2 Fire Suppression

Fire suppression is provided by portable fire extinguishers, hose reels and foam carts. An estimated 100 fire extinguishers and hose reels are placed throughout the site. Two portable foam carts are located one each in the power building and Firehouse No. 2. The emergency fire suppression equipment is capable of handling the following:

- Electrical fires, using fixed and portable carbon dioxide (CO_2) extinguisher systems.
- Fuel oil and flammable liquid fires, using fixed and mobile foam systems.
- Other types of fires, using fixed, mobile, portable extinguisher and hose-line water systems (TRC, 1998).

The procedure to suppress a small natural gas fire is as follows:

- Stop flow of gas, using remote valves only.
- Extinguish the fire, using CO_2 or dry chemical fire extinguishers, if safe to do so.
- A continuously burning natural gas leak may be allowed to burn itself off presenting less of a hazard than a nonburning leak (PG&E, 1997).

In the event of a large natural gas (or other type) fire, employees would immediately notify the Morro Bay Fire Department (MBFD) (PG&E, 1997). Existing MBFD resources include the following:

- 1 Fire Chief
- 3 Fire Captains
- 6 Engineers
- 15-20 Reserve Firefighters
- 2 Fire Stations
- 2 Type I Fire Engines
- 1 Type II Fire Engine
- 1 75-foot ladder/aerial truck
- 1 Paramedic Squad Truck
- 1 Command Vehicle
- 2 Support Vehicles

6.17.2 IMPACTS

Significance criteria were determined based on California Environmental Quality Act Guidelines, Appendix G, Environmental Checklist Form (approved January 1, 1999) and on performance standards or thresholds adopted by responsible agencies. An impact may be considered significant if the Project results in a substantial increase in risk to worker safety.

6.17.2.1 Construction and Demolition Impacts

For construction of the Project at MBPP, including demolition of onsite tanks and disassembly/removal of the existing power building and stacks, Duke Energy will require construction/demolition contractors to develop comprehensive site-specific health and safety programs to protect the health and safety of their employees. This program will meet or exceed applicable federal and governmental safety policies and procedures, and will have the flexibility to incorporate subcontractor procedures and policies. An example table of contents for the Construction Safety Program is shown in Table 6.17-4. It includes programs for administration, personal protective equipment, injury prevention, occupational health, fire protection and prevention, and equipment safety.

Contractors will provide safety professionals to monitor construction/demolition activities in conjunction with the Duke Energy Site Manager and assist in implementing the construction/demolition safety program. In addition, contractors will assist in managing the safety performance of subcontractors and will establish with the subcontractors that safety is a condition of employment. Subcontractors will be required to meet stringent safety criteria, described in their prequalification packages. Subcontractors will be included in all aspects of the worker safety program and will be monitored daily to assure compliance. Major elements of the construction safety program are summarized in the following sections.

6.17.2.1.1 Orientation/Training

A safety orientation/training program for supervisory personnel will continue to be conducted. This program will review safety responsibilities for administering and enforcing requirements of the construction safety program.

TABLE 6.17-4

EXAMPLE TABLE OF CONTENTS
CONSTRUCTION HEALTH AND SAFETY PROGRAM

TABLE 6.17-4

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TABLE 6.17-4

EXAMPLE TABLE OF CONTENTS
CONSTRUCTION HEALTH AND SAFETY PROGRAM

98-710/Rpts/AFC(text)/Tbls/Sec 6.17 (9/27/00/jb)

Source: Duke/Fluor Daniel, 1999; TRC Environmental Corporation, 1994.

Safety orientation will continue to be provided for all craftsmen prior to beginning work on the MBPP Project. Orientation/training will include, but not be limited to:

- Company safety record/policy
- Confined space
- Emergency planning
- Excavations
- Fall protection
- Fire protection
- First aid
- Hazard communication/reporting
- Hearing protection
- Housekeeping
- Injury reporting
- Inspection/Audit
- Lockout/tagout[1]
- Permitting
- Plant requirements
- Personal protective equipment
- Process safety management
- Respiratory protection
- Rigging safety
- Safe driving
- Safety meetings
- Worker involvement

Each construction worker will be issued a copy of the Construction Contractor's Employee Safety Handbook and will sign an acknowledgement that the contents are understood.

6.17.2.1.2 Job Safety Analysis

A job safety analysis is a basic procedure for establishing the safe approach to performing a task. It consists of a written procedure to review job methods, identify hazards and recommend safety procedures. The content of a job safety analysis includes the following:

- Define the tasks in a job
- Break down each task into a sequence of steps
- Identify potential hazards in each step and assess resulting risks
- Reduce/eliminate risks at the source, where possible
- Recommend safe procedures to offset residual risks

[1] Lockout/tagout procedure uses special switches, locks, and tags with picture identification to assure that specific electrical and fluid flow controls are deactivated during maintenance and repair so that no person can turn the circuit or potentially dangerous system back on before every repair person has finished work and is out of danger.

6.17.2.1.3 Safety Task Assignments

Before any assigned task is undertaken, construction site leadership will continue to provide safety task assignments to workers, either individually or in groups. The assignments usually involve demonstration of how to perform the task safely. They also address any hazards that may be involved.

6.17.2.1.4 Toolbox Meetings

Each worker will continue to be required to attend regular toolbox safety meetings. Specific safety subjects to be discussed will be provided by the safety department or members of the group. Current safety performance and safety issues related to recent, ongoing or future work also will be discussed at these meetings.

In addition, there will be weekly supervisors' safety meetings. There also will be site-wide safety meetings for exchange of information.

6.17.2.1.5 Site Management Supervision Responsibilities

The Duke Energy site manager will continue to be responsible for health and safety matters during construction. The site manager will assure that all levels of supervision recognize and understand their authority and accountability for safety in their work areas.

A key responsibility of the construction contractor will be to enforce safety programs through use of adequate inspections and supervision. Programs that encourage proactive safety awareness with direct line supervision will be implemented, including:

- Weekly meetings with direct line supervision to discuss current accident experience and other topics related to work assignments.
- Training programs to further align the responsibilities of supervision.
- Supervisors' safety education, which shows the relationship between accident costs and reduced profitability. Education topics include workers' compensation, accident prevention, work habits and supervisory methods.
- Planning, Observation and Correction: This program establishes a systematic approach for incorporating safety planning into daily activities, observing unsafe acts or conditions, and implementing immediate corrective action.

6.17.2.1.6 Project Monitoring Program

Corporate audits will be conducted to assure a safe work site and that supervisors are adequately trained in implementing the safety program. Audits will analyze onsite work practices and evaluate performance.

6.17.2.1.7 Accident/Incident Investigations

An accident or unsafe incident will be investigated to determine its cause, after which methods will be implemented to eliminate the cause.

6.17.2.1.8 Safety Goals

The overall safety goal is an OSHA recordable incidence rate of 1.0 or less per 200,000 man-hours worked, and a lost-time incidence rate of 0.0. Other goals include, but are not limited to:

- Provide safe and healthful working conditions for site personnel.
- Assure that subcontractors are actively involved in project safety programs and in 100 percent compliance with safety requirements.
- Prevent accidents.
- Eliminate occupational illnesses, injuries.
- Provide medical services.
- Provide fire protection.
- Provide for application of safety rules, regulations and codes governing the construction industry.
- Assure a drug-free workplace.
- Assure that consideration of safety is included in plans, studies, schedules and cost estimates.

6.17.2.1.9 Safety Incentives

Safety incentives will reward personnel for attainment of goals for recordable and lost-workday case rates. Example incentives are banners, signs and safety thermometers that compare actual performance to goals. Safety incentives will be used as motivational tools to promote positive safety performance and enhance employee involvement.

Successful safety incentives include, but are not limited to:

- Encourage competition between crews.
- Reward employees individually for safety awareness.
- Compensate all personnel on a project for working safely.
- Employee safety lunches.

6.17.2.1.10 Fire Protection

Fire protection for the Project is an extension of fire protection for the existing MBPP. Fire prevention and protection requirements and resources have been analyzed for the following Project activities:

- Disassembly and removal of onsite fuel oil tanks.
- Construction of new CTGs.
- Demolition of existing power building and stacks.
- Operation of the CTGs.

Examples of tasks that have special need of analysis for fire protection needs are the extensive use of cutting torches to disassemble fuel oil tanks, and construction of natural gas pipeline add ons to connect to the new CTGs.

The MBPP will continue to rely on both onsite fire protection systems and MBFD fire suppression and emergency response resources. Concerning onsite fire protection systems, the new facilities constructed by the Project will be connected to the existing fire protection systems. Hence, extensions of the current underground fire water piping network will be installed to continue to provide water from the million-gallon onsite storage tank and the 500,000-gallon offsite tank, if needed. Changes in the underground fire water piping network or addition of hydrants would be provided to the MBFD for review, comment and approval.

Demolition of the onsite fuel oil tanks is of special interest to fire prevention because this activity will involve the use of oxy-acetylene cutting torches that operate at high temperatures in an environment of fuel oil sludges and enclosed spaces. Duke Energy sponsored a study (Duke Engineering, 2000), of the potential impacts of fire protection to be provided by the MBFD for the demolition, and the MBFD arranged their own analyses (Douglas Woods & Associated, Inc., 2000; CDF/SLOCFD, 2000; Fulton Fire Engineering, Inc., 2000a and 2000b; Hunt Research Corporation, 2000a, 2000b, and 2000c).

The following resources and requirements will be implemented to assure that adequate fire prevention and protection are available for demolition of onsite fuel oil tanks and other aspects of construction/demolition for the Project:

- At least one access route to the onsite fuel oil tanks will have a minimum width of 16 feet and will be able to support a 30-ton live/12-ton axle load.
- A fire connection to the existing fire water source or water tender truck will be within 150 feet of each tank during the period of its removal.
- Vegetation will be no closer than 30 feet to each tank during the period of its removal.

- Required portable fire extinguishers will be available within 25 feet of construction/demolition work locations, and will be identified as a Class A or Class ABC, as appropriate.
- Fire response guidance contained in Volume II (Facility Emergency Response Plan) of the Business Plan/Contingency Plan (DESI, 1999) will continue to be posted and available for all employees.
- Construction/demolition contractors will have access to a water supply for suppression of incipient small fires (i.e., suppression of larger or post-incipient small fires is the responsibility of the MBFD).
- Duke Energy will continue to provide the stationary mounted fire hoses that are located as needed in newly constructed Project facilities.
- A fire extinguisher will continue to be available on each piece of heavy-duty construction/demolition equipment.
- On-site refueling of heavy-duty construction/demolition equipment will comply with Section 7904 of the Uniform Fire Code.
- Delivery of fuel for heavy-duty construction/demolition equipment will comply with Section 7908.2.8 of the Uniform Fire Code.
- Onsite fuel tank demolition activities of tank cleaning and welding will conform to following American Petroleum Institute (API) Standards:
  - 2009 (Safe Welding and Cutting Practices in Refineries, Gas Plants and Petrochemical Plants).
  - 2015 (Safe Entry and Cleaning of Petroleum Tanks).
- Removal protocol for polyurethane insulation will prevent burning, or even overheating, and thereby prevent generation of toxic noncriteria pollutants from degradation of insulation.
- Activities directly associated with the inside of the tanks (e.g., sludge removal, wall cleaning, wall cutting) will be preceded and accompanied by monitoring of the tank atmosphere for toxic, flammable and explosive concentrations.
- Demolition protocol will include measures to exclude electrical ignition sources (e.g., power cords and non-explosion-proof switches) from areas where flammable or explosive atmospheres may exist. The protocol will also prevent generation of static electrical discharges from activities such as high pressure steam cleaning.
- The soils around the onsite tanks will be evaluated for their ability to support MBFD trucks and outriggers before demolition begins. If the soils are too soft, then alternative measures will be developed to provide adequate fire suppression and high-angle rescue capabilities.
- Demolition will be designed and implemented to allow fire trucks access within 100 feet of each tank during the period of its demolition.
- The fire prevention and safety plan applicable to onsite tank demolition will include specific protocols for the safe storage, transport, handling, and use of acetylene, oxygen, and other substances needed in the demolition.

Additional fire prevention resources are being proposed by Duke Energy as part of the Project to address potential shortfalls in manpower and other resource requirements within the City of Morro Bay Fire Department. Duke Energy proposes that this "Fire Safety Program" will assure that the City can fulfill several functions during the life of the project, including:

- Emergency response
- Responsibility to check construction plans
- "command and control" and overall management responsibilities for a fire incident, in one occurred
- Inspection and training requirements

This program is described in Appendix 6.17-2, and as part of the Project, will become enforceable through the Commission licensing process. The Program will commence when the removal of the onsite tank farm begins.

Furthermore, Duke Energy acknowledges that the City of Morro Bay may also require resources to provide input to the Commission licensing process for the review of applicable local fire safety requirements. Duke Energy and the City have agreed that the proposed Cost Reimbursement Agreement between the parties includes reimbursement for costs associated with the fire review that the City may incur, and that the proposed Fire Safety Program will address potential shortfalls in manpower once the Project is approved and Duke Energy elects to proceed with the Project.

6.17.2.2 Operations and Maintenance Impacts

The MBPP is an operating facility. As a result, worker safety policies, procedures and equipment are established and functioning in accordance with appropriate laws and regulations.

In response to the proposed Project, existing procedures and policies will be extended to cover activities associated with the new combined-cycle plant. These will include identification of emergency response personnel, provision of personal protective equipment, and placement of emergency equipment, such as fire extinguishers, and spill containment.

The Fire Prevention Plan for the MBPP will be modified to account for changes appropriate to operating CTGs rather than boiler units.

6.17.2.3 Cumulative Impacts

6.17.2.3.1 Project Construction

Project construction will occur simultaneously with ongoing power plant operations of Units 1 through 4. Much of the Project's construction activity will occur in areas of the site that are not utilized for existing operations (see Chapter 2.0 - Project Description). Ongoing operations frequently include onsite construction as part of normal operation and maintenance procedures. For these activities, separate, established safety procedures are applied to construction personnel.

Other onsite activities (e.g., tank removal) will be conducted in accordance with site-specific health and safety plans, and in accordance with Duke Energy corporate safety policies. Offsite projects are summarized in Section 6.1).

The cumulative impacts of simultaneous worker activities to construct the Project, operate the existing plant, and carry out the offsite projects identified within the area protected by the MBFD have been estimated. The resources needed to provide adequate fire protection will be available to reduce the potential cumulative impact below a level of significance.

6.17.2.3.2 Project Operation

Worker safety procedures for the new combined-cycle plant will be much the same as for existing operations of Units 1 through 4. Some procedures such as emergency egress will change because of the new layout of power control buildings, aqueous ammonia storage and unloading facilities, and other facilities.

During the period from 2003 to 2007, demolition of the current power building and stacks will occur simultaneously with operation of the new combined-cycle plant. During the period from 2001 to 2003, the separate project to demolish the onsite and offsite tank farms will occur at the same time as operation of the new combined-cycle plant. Each of these simultaneous projects will have its own worker safety procedures, designed to comply with worker safety policies.

6.17.2.4 Project Design Features

The potential for adverse impacts to worker safety is managed through the safety policies and procedures described herein for Project construction and operations/maintenance.

6.17.3 MITIGATION MEASURES

Based on the above analysis of impacts, and the safety policies and procedures in place for the Project, no mitigation measures are required.

6.17.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Existing equipment, procedures and policies to protect worker safety during construction and operations/maintenance activities are in place and operating successfully. As a result, no significant unavoidable adverse impacts to worker safety are anticipated to result from the Project.

6.17.5 LORS COMPLIANCE

LORS pertaining to worker safety are described in Section 7.4.2, and listed in Table 6.17-5 along with the name of the administering agency and the project's approach to compliance. Through the ongoing training, site-specific construction health and safety plans, and the corporate Duke Energy health and safety plans, the Project will comply with all applicable LORS for worker safety during Project construction and operation. To assist in maintaining compliance, the written worker safety programs will be provided to Cal-OSHA prior to obtaining the facility construction permit. Thereafter, self-auditing will be conducted, as required.

6.17.6 REFERENCES AND SOURCES OF INFORMATION

CDF/San Luis Obispo County Fire Department (CDF/SLOCFD). Letter to Greg Cummings of San Luis Obispo County Planning Department, March 20, 2000.

Duke Energy Morro Bay LLC. *Hazardous Waste Permit Application: Permit Renewal for Class I Surface Impoundments, Morro Bay Power Plant, Volume I*. June 1998.

Duke Engineering & Services, Inc. (Duke Engineering). *Facility Emergency Response Plan, Volume II of Business Plan/Contingency Plan: Morro Bay Power Plant.* March 2000.

Duke Engineering. *Fire Department Impact Study, Morro Bay Power Plant, Tank Farm Removal.* 2000.

Douglas Woods & Associates, Inc. Letter from Douglas Wood to Allan P. Rhodes of Duke Energy, Morro Bay. March 21, 2000.

Duke/Fluor Daniel California Operations. *Health and Safety Policies and Procedures*. July 1, 2000.

Duke/Fluor Daniel. Construction safety procedures information. Facsimile transmission. January 1999.

TABLE 6.17-5

SUMMARY OF LORS AND COMPLIANCE APPLICABLE TO WORKER SAFETY
MORRO BAY POWER PLANT MODERNIZATION PROJECT

JURISDICTION	LORS/AUTHORITY	ADMINISTERING AGENCY	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE
	See Table 7-5.	Various. See Table 7-5.	Industry codes and trade association standards, usually for equipment.	
Federal	Occupational Health & Safety Act of 1970 (OSHA), 29 USC §651 et seq.; 29 CFR 1910 et seq.; 1926 et seq.	Fed-OSHA and Cal-OSHA.	Meet employee health and safety standards for employer-employee communications, electrical operations and chemical exposures.	Continuous implementation of the DFDCO Health and Safety Policies and Procedures (DFDCO, 2000).
	Department of Labor, Safety and Health Regulations for Construction, Contract Work Hours and Safety Standards Act, §333; 40 USC §327 et. seq.	Fed-OSHA and Cal-OSHA.	Meet employee health and safety standards for construction activities. Requirements addressed in CCR Title 8, General Construction Safety Orders, Chapter 4, Subchapter 4.	Continuous implementation of the DFDCO Health and Safety Policies and Procedures (DFDCO, 2000) and specific Construction Safety Procedures (DFD, 1999).
	National Fire Protection Association (NFPA)	Morro Bay Fire Department.(1)	Meet requirements for fire safety and property protection from hazards created by fire and explosion. Table 7-3 summarizes standards applicable to project.	MBPP will provide equipment that meets NFPA Standards for worker safety from hazards created by fire and explosion.
	Uniform Fire Code, Articles 4, 79, 80.	Morro Bay Fire Department.(1)	Meet requirements for obtaining permits (Article 4), flammable and combustible liquids (Article 79), for the storage and handling of hazardous materials, and provisions regarding fire protection and neutralization systems for emergency venting. (Article 80).	Continuous implementation of the DFDCO Health and Safety Policies and Procedures (DFDCO, 2000) and the Business Plan/Contingency Plan relative to handling hazardous materials (TRC, 1998).

(1) Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state, and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.

TABLE 6.17-5

SUMMARY OF LORS AND COMPLIANCE APPLICABLE TO WORKER SAFETY MORRO BAY POWER PLANT MODERNIZATION PROJECT (Continued)

JURISDICTION	LORS/AUTHORITY	ADMINISTERING AGENCY	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE
	See Table 7-5.	Various. See Table 7-5.	Industry codes and trade association standards, usually for equipment.	
State	Clean Air Act, 42 USC §7409, 7411, 7412, 7521 et seq.	San Luis Obispo County APCD.	Meet standards for air quality, hazardous air pollutants, new sources, and control technology.	Compliance with air quality protects workers and offsite public.
	California Code of Regulations (CCR), Title 8, Title 24.	Cal-OSHA.	Meet requirements for a safe and hazard-free working environment. Requirements include General Industry Safety Orders, General Construction Safety Orders, Electrical Safety orders. See Table 7-4.	Continuing implementation of the DFDCO Health and Safety Policies and Procedures (DFDCO, 2000).
	22 CCR §66264.16, 66270.14	California Department of Health Services	Meet requirements for personnel training and recordkeeping.	Actively implementing DFDCO version of PG&E safety training matrix (PG&E, 1998).
	California Health & Safety Code §25500 to 25541; 19 CCR §2720-2734.	Office of Emergency Services; Morro Bay Fire Department(1)	Inventory, reporting, business and area planning requirements in accordance with Federal Emergency Planning and Community Right-to-Know Act of 1986.	Reporting and handling requirements for hazardous materials and wastes are followed meticulously for compliance and to assure worker safety.
	California Clean Air Act, California Health and Safety Code §39650 et seq.	California Air Resources Board; San Luis Obispo County APCD.	Meet requirements for Best Available Control Technology to minimize exposure to toxic air pollutants and possible risk assessments for carcinogenic pollutants.	Compliance with BACT and other air quality LORS protects workers and offsite public.

(1) Pursuant to ccr title 20, appendix b(h)(1)(b): each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state, and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.

TABLE 6.17-5

SUMMARY OF LORS AND COMPLIANCE APPLICABLE TO WORKER SAFETY MORRO BAY POWER PLANT MODERNIZATION PROJECT (Continued)

JURISDICTION	LORS/AUTHORITY	ADMINISTERING AGENCY	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE
	See Table 7-5.	Various. See Table 7-5.	Industry codes and trade association standards, usually for equipment.	
Local	California Clean Air Act, California Health & Safety Code §39650 et seq.	San Luis Obispo County APCD.	Comply with rules and regulations that require permits for stationary sources of air emissions. Health risk assessment for sources subject to new source review.	Compliance with BACT and other air quality LORS protects workers and offsite public.
	City of Morro Bay Zoning Ordinance, Chapter 17.52, §17.52.010.	Morro Bay Fire Department(1)	Provide adequate safety devices for flammable and explosive materials.	Special engineering design, equipment and procedures assures compliance with LORS on flammable and explosive materials (see Section 6.15 - Hazardous Materials Handling).
Industry	See Table 7-5.	Various. See Table 7-5.	Industry codes and trade association standards, typically requirements of equipment manufacturers.	DFDCO meets or exceeds industry standards, including those that protect workers.

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(1) Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state, and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.

Duke/Fluor Daniel California Operations. *Health and Safety Policies and Procedures*. July 1, 2000.

Fulton Fire Engineering, Inc. Letter from John Fulton to Jeff Jones, Fire Chief, Morro Bay Fire Department. March 15, 2000a.

Fulton Fire Engineering, Inc. Memorandum from John Fulton to Douglas Wood of Douglas Wood and Associates, Inc. March 15, 2000b.

Hunt Research Corporation. Letter from James W. Hunt to Jeff Jones, Fire Chief, Morro Bay Fire Department, March 15, 2000a.

Hunt Research Corporation. Letter from James W. Hunt to Jeff Jones, Fire Chief, Morro Bay Fire Department, March 25, 2000b.

Hunt Research Corporation. Letter from James W. Hunt to Jeff Jones, Fire Chief, Morro Bay Fire Department, March 28, 2000c.

PG&E. *Annual Cal-OSHA-Mandated Safety Training Matrix Translated to PG&E Departments*. Revised November 16, 1998.

PG&E. Incipient Fire Manual. Updated April 10, 1995.

PG&E. Storm Water and Pollution Prevention Plan. December 1996.

TRC. *Business Plan/Contingency Plan: Morro Bay Power Plant. Volume I - Plan Administration and Hazardous Material Inventories.* Prepared for Duke Energy Morro Bay LLC, Morro Bay, California. June 1998.

TRC Environmental Corporation. *Health and Safety Program.* Updated June 1994.